



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2020-0400; FRL-9274-01-R4]

Air Plan Approval; Georgia;

Atlanta Area Emissions Inventory Requirements for the 2015 8-Hour Ozone Standard

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a State Implementation Plan (SIP) revision submitted by the State of Georgia through the Georgia Environmental Protection Division (GA EPD) on July 2, 2020, to address the base year emissions inventory requirements for the 2015 8-hour ozone national ambient air quality standards (NAAQS) for the Atlanta, Georgia 2015 8-hour ozone nonattainment area (hereinafter referred to as the “Atlanta Area”). These requirements apply to all ozone nonattainment areas. This action is being proposed pursuant to the Clean Air Act (CAA or Act).

DATES: Comments must be received on or before **[Insert date 30 days after date of publication in the FEDERAL REGISTER]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R04-OAR-2020-0400 at www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file

sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION CONTACT: Tiereny Bell, Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S.

Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. The telephone number is (404) 562-9088. Ms. Bell can also be reached via electronic mail at bell.tiereny@epa.gov.

SUPPLEMENTARY INFORMATION:

I. Background

On October 1, 2015, EPA promulgated a revised 8-hour primary and secondary ozone NAAQS, strengthening both from 0.075 parts per million (ppm) to 0.070 ppm (the 2015 8-hour ozone NAAQS). *See* 80 FR 65292. The 2015 8-hour ozone NAAQS is set at 0.070 ppm based on an annual fourth-highest daily maximum 8-hour average concentration averaged over three years. Under EPA's regulations at 40 Code of Federal Regulations (CFR) part 50, the 2015 8-hour ozone NAAQS is attained when the 3-year average of the annual fourth-highest daily maximum 8-hour average ambient air quality ozone concentrations is less than or equal to 0.070 ppm. *See* 40 CFR 50.19. Ambient air quality monitoring data for the 3-year period must meet a data completeness requirement. *See* 40 CFR part 50, Appendix U. The ambient air quality monitoring data completeness requirement is met when the average percentage of days with valid ambient monitoring data is greater than 90 percent and no single year has less than 75 percent data completeness as determined using Appendix U.

Upon promulgation of a new or revised ozone NAAQS, the CAA requires EPA to designate as nonattainment any area that is violating the NAAQS based on the three most recent years of ambient air quality data. On April 30, 2018, EPA designated a seven-county area in and around metropolitan Atlanta as a marginal ozone nonattainment area for the 2015 8-hour ozone

NAAQS.¹ The Atlanta Area was designated nonattainment for the 2015 8-hour ozone NAAQS on April 30, 2018 (effective August 3, 2018) using 2014–2016 ambient air quality data. *See* 83 FR 25776. On December 6, 2018, EPA finalized a rule titled “Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements” (SIP Requirements Rule) that establishes the requirements that state, tribal, and local air quality management agencies must meet as they develop implementation plans for areas where air quality exceeds the 2015 8-hour ozone NAAQS.² *See* 83 FR 62998; 40 CFR part 51, Subpart CC. This rule establishes nonattainment area attainment deadlines based on Table 1 of section 181(a) of the Clean Air Act (CAA), including an attainment deadline of August 3, 2021, three years after the August 3, 2018 effective date, for areas classified as marginal for the 2015 8-hour ozone NAAQS.

Based on the nonattainment designation, Georgia was required to develop a SIP revision addressing certain CAA requirements for the Atlanta Area. Among other things, Georgia was required to submit a SIP revision addressing the emissions inventory requirements in CAA section 182(a)(1).

Ground level ozone is not emitted directly into the air but is created by chemical reactions between oxides of nitrogen (NO_x) and volatile organic compounds (VOC) in the presence of sunlight. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NO_x and VOC. Section 182(a)(1) of the CAA requires states with areas designated nonattainment for the ozone NAAQS to submit a SIP revision providing a comprehensive, accurate, and current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area. NO_x and

¹ The nonattainment area for the 2015 8-hour ozone standard consists of the following counties: Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry.

² The SIP Requirements Rule addresses a range of nonattainment area SIP requirements for the 2015 8-hour ozone NAAQS, including requirements pertaining to attainment demonstrations, reasonable further progress (RFP), reasonably available control technology, reasonably available control measures, major nonattainment new source review, emission inventories, and the timing of SIP submissions and compliance with emission control measures in the SIP.

VOCs are the relevant pollutants because they are the precursors—i.e., the pollutants that contribute to the formation—of ozone.

II. State's Submittal

On July 2, 2020, Georgia submitted a SIP revision addressing the emissions inventory requirements related to the 2015 8-hour ozone NAAQS for the Atlanta Area.³ EPA is proposing to approve this SIP revision as meeting the inventory requirements of section 182(a)(1) of the CAA and meeting EPA's SIP Requirements Rule. More information on EPA's analysis of Georgia's SIP revision and how this SIP revision addresses these requirements is provided below.

III. Analysis of State's Submittal

As discussed above, section 182(a)(1) of the CAA requires areas to submit a comprehensive, accurate, and current inventory of actual emissions from all sources of the relevant pollutant or pollutants in each ozone nonattainment area. The section 182(a)(1) base year inventory is defined in the SIP Requirements Rule as “a comprehensive, accurate, current inventory of actual emissions from sources of VOC and NO_x emitted within the boundaries of the nonattainment area as required by CAA section 182(a)(1).” *See* 40 CFR 51.1300(p). The inventory year must be selected consistent with the baseline year for the RFP plan as required by 40 CFR 51.1310(b),⁴ and the inventory must include actual ozone season day emissions as

³ In the July 2, 2020, SIP revision, GA EPD submitted a certification that existing SIP-approved Georgia rules satisfy the permit program requirements found in section 172(c)(5) and section 173 of the CAA. GA EPD also provided a written commitment to take action to meet the emissions statement requirement located in section 182(a)(3)(B) of the CAA. EPA will take action on these SIP revisions in separate rulemakings.

⁴ 40 CFR 51.1310(b) states that “at the time of designation for the ozone NAAQS the baseline emissions inventory shall be the emissions inventory for the most recent calendar year for which a complete triennial inventory is required to be submitted to EPA under the provisions of subpart A of this part. States may use an alternative baseline emissions inventory provided that the year selected corresponds with the year of the effective date of designation as nonattainment for that NAAQS. All states associated with a multi-state nonattainment area must consult and agree on using the alternative baseline year. The emissions values included in the inventory required by this section shall be actual ozone season day emissions.” For additional information, please see the guidance document titled “Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality

defined in 40 CFR 51.1300(q)⁵ and contain data elements consistent with the detail required by 40 CFR part 51, subpart A. *See* 40 CFR 51.1315(a), (c), (e). In addition, the point source emissions included in the inventory must be reported according to the point source emissions thresholds of the Air Emissions Reporting Requirements (AERR) in 40 CFR part 51, subpart A.

Georgia selected 2014 as the base year for the emissions inventory, which is the year corresponding with the first triennial inventory under 40 CFR part 51, subpart A. This base year is one of the three years of ambient data used to designate the Atlanta Area as a nonattainment area and therefore represents emissions associated with nonattainment conditions. The emissions inventory is based on data developed and submitted by GA EPD to EPA's 2014 Emission Inventory (NEI), and it contains data elements consistent with the requirements of 40 CFR part 51, subpart A.⁶

Georgia's emissions inventory for the Atlanta Area provides 2014 typical average summer day emissions for NO_x and VOCs for the following general source categories: point sources, MAR (marine vessels, aircraft and rail) sources, nonpoint sources, on-road mobile sources, non-road mobile sources, fire events, and biogenic sources. The summer day emissions were calculated as the average of emissions during weekdays in July 2014. A detailed discussion of the inventory development is located on pages 1 through 6 of the documents in the July 2, 2020 submission entitled "Atlanta Nonattainment Area Emissions Inventory for the 2015 8-Hour

Standards (NAAQS) and Regional Haze Regulations," EPA-454/B-17-003, July 2017, available at: <https://www.epa.gov/air-emissions-inventories/air-emissions-inventory-guidance-implementation-ozone-and-particulate>.

⁵ "Ozone season day emissions" is defined as "an average day's emissions for a typical ozone season work weekday. The state shall select, subject to EPA approval, the particular month(s) in the ozone season and the day(s) in the work week to be represented, considering the conditions assumed in the development of RFP plans and/or emissions budgets for transportation conformity." *See* 40 CFR 51.1300(q).

⁶ Data downloaded from the EPA Emissions Inventory System (EIS) from the 2014 NEI was subjected to quality assurance procedures described under quality assurance details under 2014 NEI Version 1 located at <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>. The quality assurance and quality control procedures and measures associated with this data are outlined in the State's Emission Inventory Quality Assurance Project Plan. The 2017 GA EI QAPP can be found at <https://epd.georgia.gov/document/document/appendix-c-georgia-quality-assurance-project-plan-document/download>.

Ozone NAAQS” (Inventory Document) in the State’s July 2, 2020 submittal. The table below provides a summary of the emissions inventory.

Table 1 – 2014 Emissions for the Atlanta Area ⁷ [Tons per summer day]										
County	Point		Marine Vessels, Aircraft, and Rail		Nonpoint		On-road		Non-road	
	NO _x	VOC	NO _x	VOC	NO _x	VOC	NO _x	VOC	NO _x	VOC
Bartow	17.01	1.07	0.84	0.06	0.14	3.61	11.03	3.51	1.30	1.29
Clayton	0.28	0.59	13.27	1.85	0.15	6.69	8.39	3.63	2.45	1.26
Cobb	2.05	1.35	2.73	0.73	0.59	18.14	26.23	11.87	7.24	9.30
Dekalb	0.33	3.43	0.75	0.08	0.53	18.41	25.84	10.46	6.27	8.06
Fulton	1.17	0.69	2.49	0.16	1.23	25.76	42.83	19.54	10.74	9.04
Gwinnett	0.00	0.21	0.64	0.05	0.58	21.77	24.18	11.54	10.58	11.04
Henry	4.37	1.18	0.82	0.04	0.13	4.66	4.35	2.40	2.38	1.46
Total	25.21	8.52	21.54	2.97	3.35	99.04	142.85	62.95	40.96	41.45

The emissions reported for the Atlanta Area reflect the emissions within the seven counties comprising the nonattainment area. The inventory contains point source emissions data for the facilities located within the Area. More detail on the emissions for individual source categories is provided below and in Appendix A of Georgia’s July 2, 2020 submittal.

Point sources are large, stationary, identifiable sources of emissions that release pollutants into the atmosphere. The Electric Generating Units (EGU) point source emissions inventory was developed from facility-specific emissions data. NO_x emissions were calculated using continuous emissions monitoring system data which included hourly measurements. For VOC emissions, GA EPD used facility-specific emissions data reported to the 2014 NEI from

⁷ For the purpose of Table 1 – 2014 Emissions for the Atlanta Area, EPA rounded to the nearest hundredth of a ton per summer day.

sources that are required to submit inventory data according to the AERR. The non-EGU point source emissions inventory for the Atlanta Area was developed from non-EGU facility-specific data reported to the 2014 NEI from sources that are required to submit inventory data according to the AERR. The point source emissions data meets the point source emissions requirements of 40 CFR part 51, subpart A. A detailed account of the non-EGU point sources can be found on pages 4 through 6 of the emissions inventory document in Georgia's submittal.

MAR sources are marine, aircraft, and rail sources of emissions separated from the point and nonpoint source categories. Emissions for these sources were obtained from the 2014 NEI. A detailed account of the MAR sources can be found on pages 2 and 5–6 of the emissions inventory document in Georgia's submittal.

Nonpoint sources are small stationary sources of emissions which, due to their large number, collectively have significant emissions (e.g., dry cleaners, service stations). Emissions for these sources were obtained from the 2014 NEI. A detailed account of the nonpoint sources can be found on page 2 of the emissions inventory document in Georgia's submittal.

On-road mobile sources include vehicles used on roads for transportation of passengers or freight. Georgia developed its on-road emissions inventory using EPA's Motor Vehicle Emission Simulator (MOVES) model for each ozone nonattainment county.⁸ County level on-road modeling was conducted using county-specific vehicle population and other local data. A detailed account of the on-road sources can be found in Appendix A and page 2 through 3 of the emissions inventory document in Georgia's submittal.

Non-road mobile sources include vehicles, engines, and equipment used for construction, agriculture, recreation and other purposes that do not use the roadways (e.g., lawn mowers, construction equipment, railroad locomotives and aircraft). Georgia obtained emissions for the non-road mobile sources from the 2014 NEI. Those emissions were estimated using EPA's

⁸ Georgia used MOVES version 2014a because this was the latest version available at the time that the State submitted its SIP revision.

National Mobile Inventory Model (NMIM) with updated NMIM County Database (NCD) files from GA EPD. A detailed account of non-road mobile sources can be found in Appendix D of the July 2, 2020, submittal.

Georgia also included 2014 actual emissions from fire events and biogenic sources in its emission inventory. Wildland fires are unplanned, unwanted wild land fires including unauthorized human-caused fires, escaped prescribed fire projects, or other inadvertent fire situations where the objective is to put the fire out. Prescribed fires are any fires ignited by management actions to meet specific objectives related to the reduction of the biomass potentially available for wildfires. Fire event emissions were developed by GA EPD using fire records collected from the Georgia Forestry Commission (GFC). When fire activities were not included in the GFC database, military bases and federal agencies (USFS and FWS) records were used. In addition, GA EPD collected detailed burning records for the Okefenokee area which showed burned area per day. A detailed account of fire event sources can be found in Appendix A and on page 4 of the emissions inventory document in the July 2, 2020, submittal.

Biogenic emission sources are emissions that come from natural sources. GA EPD obtained biogenic emissions for 2014 from the 2014 NEI and used the summary of county-specific daily biogenic emissions.⁹ A detailed account of biogenic sources can be found in

Appendix A and on page 4 of the emissions inventory document in the Georgia submittal. The

⁹ The biogenic emissions were calculated from the Biogenic Emission Inventory System (BEIS) version 3.61 model in the Sparse Matrix Operator Kernel Emissions model (SMOKE). These emissions were obtained from NEI2014. The data was downloaded from the U.S. EPA's Air Emissions Inventories website: <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>. More detailed information can be found in the SMOKE manual (<https://www.cmascenter.org/smoke/>).

table below provides a summary of the 2014 fire event¹⁰ and biogenic emissions for the Atlanta Area.

Table 2 – 2014 – Fire Event and Biogenic Emissions for the Atlanta Area [Tons per summer day]				
County	Fire events		Biogenic	
	NO _x	VOC	NO _x	VOC
Bartow	0.00	0.00	0.43	67.00
Clayton	0.00	0.00	0.14	26.68
Cobb	0.00	0.00	0.22	46.82
Dekalb	0.00	0.00	0.16	45.75
Fulton	0.00	0.00	0.27	64.04
Gwinnett	0.00	0.00	0.33	52.45
Henry	0.00	0.00	0.30	42.98
Total	0.00	0.00	1.85	345.72

EPA has preliminarily determined that Georgia’s emissions inventory meets the requirements under CAA section 182(a)(1) and the SIP Requirements Rule for the 2015 8-hour ozone NAAQS.

IV. Proposed Action

EPA is proposing to approve the SIP revision submitted by Georgia on July 2, 2020, addressing the base year emissions inventory requirements for the 2015 8-hour ozone NAAQS for the Atlanta Area. EPA proposes to find that the State’s submission meets the requirements of sections 110 and 182 of the CAA.

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. *See* 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA’s role is to approve state choices,

¹⁰ There were minimal emissions from fire events in 2014 such that, with rounding, there were 0.00 tons of NO_x and VOC emitted per summer day. For the purpose of Table 2, EPA rounded to the nearest hundredth of a ton per summer day.

provided they meet the criteria of the CAA. This proposed action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

The SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: November 17, 2021.

*John Blevins,
Acting Regional Administrator,
Region 4.*

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